SUBJECT INDEX

Aging

Factors Affecting Quality Performance of Professional Engineers, Gene W. Dalton and Paul H. Thompson, EI Apr. 90 p202-216.

Agriculture

Sumer: Where Engineering Was Born, Isabel Vargas and Héctor Gallegos, EI Jan. 90 p83-92.

Architecture

International Competition in Construction Technology, Daniel W. Halpin, EI Oct. 90 p351-359.

ASCE Activities

U.S. Civil Engineer, International Cooperation, and Soviet Union, William J. Carroll, EI Apr. 90 p121-127.

ASCE Salaries and Fees

ASCE 1989 Salary Survey, Committee on Employment Conditions of the Professional Practice Division, EI July 90 p266-283.

Barriers

Ph.D. Roadblocks for Experienced Engineers, Bruce E. Marsh, EI Jan. 90 p56-60.

Bonds, contracts

Surety Bonding and Owner-Contractor Prequalification: Comparison, Jeffrey S. Russell, EI Oct. 90 p360-374.

Bridge maintenance

Meeting Issues of Preventive Maintenance for New York City Bridges, Maciej P. Bieniek, F. H. (Bud) Griffis, Sanjiv Gokhale and Samuel I. Schwartz, EI Oct. 90 p323-332.

Bridges

Meeting Issues of Preventive Maintenance for New York City Bridges, Maciej P. Bieniek, F. H. (Bud) Griffis, Sanjiv Gokhale and Samuel I. Schwartz, EI Oct. 90 p323-332.

Building codes

Be Prepared When Tremors Come: Earthquake Issues in the Mid-South, Tzyy-Shiou Chang, EI July 90 p284-286.

Future Civil Engineering in Seismic Zones, Sergio Gonzalez-Karg, EI July 88 p368-370.

Professionalism, Larry G. Bell, EI Apr. 90 p188-189.

Case reports

Civil Engineering Education: Case Study Approach, Jeffrey S. Russell and Bob G. McCullouch, EI Apr. 90 p164-174.

Guidance for Engineering-Design-Class Lectures on Ethics, Richard H. McCuen, EI July 90 p251-257.

Why Can't You Ethicists Tell Me the *Right* Answers? Alastair S. Gunn and P. Aarne Vesilind, EI Jan. 90 p9-15.

Civil engineering

Civil Engineering Needs in the 21st Century, J. M. Roesset and J. T. P. Yao, EI July 88 p248-255.

Professional Ethical Orientation of Civil Engineering Co-op Students, Robert Tillman, EI Apr. 90 p175-187.

Civil engineers

ASCE 1989 Salary Survey, Committee on Employment Conditions of the Professional Practice Division, EI July 90 p266-283.

Civil Engineering Into the 21st Century, George Fleming, EI July 88 p357-367.

Debris Torrents and Professional Responsibilities, S. O. Russell, EI Jan. 90 p49-55.

Developing a Civil Engineer for the 21st Century, Ronald W. Eck, EI Apr. 90 p156-163.

Is Professional Registration Essential for Public-Works Managers? Dennis A. Randolph and Douglas MacTavish, EI July 90 p302-308.

U.S. Civil Engineer, International Cooperation, and Soviet Union, William J. Carroll, EI Apr. 90 p121-127.

Claims

Tort Reform and Design Professional, Dennis R. Schapker, EI July 90 p258-265.

Understanding Terra RRG Professional Liability Insurance, Randall Horne, EI July 90 p239-249.

Clean Water Act

Impact of Water-Quality Policies on Water Availability, Thomas S. Maddock, EI Oct. 90 p333-344.

Codes

Institutional Oversight to Enhance Integrity in Research, Richard H. McCuen, EI Jan. 90 p27-37.

Communication

Use of Humor by Engineers in Oral Presentations, Fred Curtis, EI July 90 p293-301.

Communication skills

Creative-Design Course for Engineering Freshmen, Kanti L. Shah, EI Oct. 90 p397-403.

Developing a Civil Engineer for the 21st Century, Ronald W. Eck, EI Apr. 90 p156-163.

Plain Engineering: Philosophical and Ethical View, Steven S. Crider, EI Apr. 90 p148-155.

Use of Humor by Engineers in Oral Presentations, Fred Curtis, EI July 90 p293-301.

Community relations

Training Municipal Employees in Hazardous-Waste Issues, Carol J. Miller, EI Jan. 90 p61-66.

Competition

International Competition in Construction Technology, Daniel W. Halpin, EI Oct. 90 p351-359.

Competitive bidding

Surety Bonding and Owner-Contractor Prequalification: Comparison, Jeffrey S. Russell, EI Oct. 90 p360-374.

Computer applications

Computing in Civil Engineering Curriculum: Needs and Issues, Kincho H. Law, William J. Rasdorf, Mohammad Karamouz and Osama Y. Abudayeh, EI Apr. 90 p128-141.

Computer programs

Meeting Issues of Preventive Maintenance for New York City Bridges, Maciej P. Bieniek, F. H. (Bud) Griffis, Sanjiv Gokhale and Samuel I. Schwartz, EI Oct. 90 p323-332.

Computers

Computing in Civil Engineering Curriculum: Needs and Issues, Kincho H. Law, William J. Rasdorf, Mohammad Karamouz and Osama Y. Abudayeh, EI Apr. 90 p128-141.

Developing a Civil Engineer for the 21st Century, Ronald W. Eck, EI Apr. 90 p156-163.

Conflict of interest

Dialogue on Political Contributions and Engineering, William E. Norris, EI Jan. 90 p38-41.

Construction industry

Commercializing Construction Research, C. William Ibbs, EI Jan. 90 p1-8.

International Competition in Construction Technology, Daniel W. Halpin, EI Oct. 90 p351-359.

Technical Personnel Shortages in Construction Industry, Russel C. Jones, EI Jan. 90 p16-26.

Consulting engineers

Understanding Terra RRG Professional Liability Insurance, Randall Horne, EI July 90 p239-249.

Continuing education

Educational Program for Hazardous-Waste Management, Carol J. Miller, Ralph H. Kummler, James H. McMicking and Robert W. Powitz, EI Apr. 90 p221-228.

Ph.D. Roadblocks for Experienced Engineers, Bruce E. Marsh, EI Jan. 90 p56-60.

Contractors

Surety Bonding and Owner-Contractor Prequalification: Comparison, Jeffrey S. Russell, EI Oct. 90 p360-374.

Contracts

Dialogue on Political Contributions and Engineering, William E. Norris, EI Jan. 90 p38-41.

Quality in Constructed Projects: International Firms and Developing Countries, E. Koehn and Durgesh C. Regmi, EI Oct. 90 p388-396.

Conversion

SI Conversion, T. J. Pilecki, EI Jan. 90 p42-48.

Cooperation

U.S. Civil Engineer, International Cooperation, and Soviet Union, William J. Carroll, EI Apr. 90 p121-127.

Cooperative education

Professional Ethical Orientation of Civil Engineering Co-op Students, Robert Tillman, EI Apr. 90 p175-187.

Creativity

Creative-Design Course for Engineering Freshmen, Kanti L. Shah, EI Oct. 90 p397-403.

Curricula

Computing in Civil Engineering Curriculum: Needs and Issues, Kincho H. Law, William J. Rasdorf, Mohammad Karamouz and Osama Y. Abudayeh, EI Apr. 90 p128-141.

Creative-Design Course for Engineering Freshmen, Kanti L. Shah, EI Oct. 90 p397-403.

Fundamentals of Engineering (FE) Examination Review, 1986, ASCE Task Committee on the Fundamentals of Engineering Examination Review, EI Apr. 88 p173-191.

Guidance for Engineering-Design-Class Lectures on Ethics, Richard H. McCuen, EI July 90 p251-257.

Need for "Professional" Education for Professional Engineers, T. E. Fenske and S. M. Fenske, EI Oct. 90 p345-350.

Should There be a Design Requirement for the Ph.D. Degree? Thomas Sputo, EI Apr. 90 p190-192.

Debris

Debris Torrents and Professional Responsibilities, S. O. Russell, EI Jan. 90 p49-55.

Decision making

Creative-Design Course for Engineering Freshmen, Kanti L. Shah, EI Oct. 90 p397-403.

Level of Significance Selection in Engineering Analysis, Kaye L. Brubaker and Richard H. McCuen, EI Oct. 90 p375-387.

Demographic projections

Technical Personnel Shortages in Construction Industry, Russel C. Jones, EI Jan. 90 p16-26.

Design

Creative-Design Course for Engineering Freshmen, Kanti L. Shah, EI Oct. 90 p397-403.

Guidance for Engineering-Design-Class Lectures on Ethics, Richard H. McCuen, EI July 90 p251-257.

Should There be a Design Requirement for the Ph.D. Degree? Thomas Sputo, EI Apr. 90 p190-192.

Tort Reform and Design Professional, Dennis R. Schapker, EI July 90 p258-265.

Developing countries

Quality in Constructed Projects: International Firms and Developing Countries, E. Koehn and Durgesh C. Regmi, EI Oct. 90 p388-396.

Dimensional analysis

SI Conversion, T. J. Pilecki, EI Jan. 90 p42-48.

Earthquake engineering

Be Prepared When Tremors Come: Earthquake Issues in the Mid-South, Tzyy-Shiou Chang, EI July 90 p284-286.

Future Civil Engineering in Seismic Zones, Sergio Gonzalez-Karg, EI July 88 p368-370.

Earthquake resistant structures

Be Prepared When Tremors Come: Earthquake Issues in the Mid-South, Tzyy-Shiou Chang, EI July 90 p284-286.

Future Civil Engineering in Seismic Zones, Sergio Gonzalez-Karg, EI July 88 p368-370.

Education

Civil Engineering Needs in the 21st Century, J. M. Roesset and J. T. P. Yao, EI July 88 p248-255.

Employment conditions

Tenure—Analysis for Professional Engineers in Education, William Lawson Magette, EI Apr. 90 p142-147.

Energy development

The Civil Engineer's Role in Energy Policy, Ben C. Gerwick, Jr., EI Oct. 88 p442-444.

Engineering

Existentialism, Engineering, and Liberal Arts, David A. Bella, EI July 90 p309-321.

International Competition in Construction Technology, Daniel W. Halpin, EI Oct. 90 p351-359.

Engineering education

Civil Engineering Education: Case Study Approach, Jeffrey S. Russell and Bob G. McCullouch, EI Apr. 90 p164-174.

Computing in Civil Engineering Curriculum: Needs and Issues, Kincho H. Law, William J. Rasdorf, Mohammad Karamouz and Osama Y. Abudayyeh, EI Apr. 90 p128-141.

Creative-Design Course for Engineering Freshmen, Kanti L. Shah, EI Oct. 90 p397-403.

Developing a Civil Engineer for the 21st Century, Ronald W. Eck, EI Apr. 90 p156-163.

Educational Program for Hazardous-Waste Management, Carol J. Miller, Ralph H. Kummler, James H. McMicking and Robert W. Powitz, EI Apr. 90 p221-228.

Fundamentals of Engineering (FE) Examination Review, 1986, ASCE Task Committee on the Fundamentals of Engineering Examination Review, EI Apr. 88 p173-191.

Guidance for Engineering-Design-Class Lectures on Ethics, Richard H. McCuen, EI July 90 p251-257.

Is Professional Registration Essential for Public-Works Managers? Dennis A. Randolph and Douglas MacTavish, EI July 90 p302-308.

Need for "Professional" Education for Professional Engineers, T. E. Fenske and S. M. Fenske, EI Oct. 90 p345-350.

Ph.D. Roadblocks for Experienced Engineers, Bruce E. Marsh, EI Jan. 90 p56-60.

Professional Ethical Orientation of Civil Engineering Co-op Students, Robert Tillman, EI Apr. 90 p175-187.

Should There be a Design Requirement for the Ph.D. Degree? Thomas Sputo, EI Apr. 90 p190-192.

Standard of Care for Delivery of Engineered Products, James C. Porter, EI Apr. 90 p193-201.

Tenure—Analysis for Professional Engineers in Education, William Lawson Magette, EI Apr. 90 p142-147.

Engineering firms

Quality in Constructed Projects: International Firms and Developing Countries, E. Koehn and Durgesh C. Regmi, EI Oct. 90 p388-396.

U.S. Civil Engineer, International Cooperation, and Soviet Union, William J. Carroll, EI Apr. 90 p121-127.

Engineering profession

Factors Affecting Quality Performance of Professional Engineers, Gene W. Dalton and Paul H. Thompson, EI Apr. 90 p202-216.

Need for "Professional" Education for Professional Engineers, T. E. Fenske and S. M. Fenske, EI Oct. 90 p345-350.

Engineering societies

Dialogue on Political Contributions and Engineering, William E. Norris, EI Jan. 90 p38-41.

Engineers

Dialogue on Political Contributions and Engineering, William E. Norris, EI Jan. 90 p38-41.

Ph.D. Roadblocks for Experienced Engineers, Bruce E. Marsh, EI Jan. 90 p56-60.

Tort Reform and Design Professional, Dennis R. Schapker, EI July 90 p258-265.

Use of Humor by Engineers in Oral Presentations, Fred Curtis, EI July 90 p293-301.

Ethics

Dialogue on Political Contributions and Engineering, William E. Norris, EI Jan. 90 p38-41.

Guidance for Engineering-Design-Class Lectures on Ethics, Richard H. McCuen, EI July 90 p251-257.

Institutional Oversight to Enhance Integrity in Research, Richard H. McCuen, EI Jan. 90 p27-37.

Plain Engineering: Philosophical and Ethical View, Steven S. Crider, EI Apr. 90 p148-155.

Professional Ethical Orientation of Civil Engineering Co-op Students, Robert Tillman, EI Apr. 90 p175-187.

Professionalism, Larry G. Bell, EI Apr. 90 p188-189.

Proper Use of P.E. Seal, Robert A. Green, EI July 90 p287-292.

A Time and Place for Ethics, Valcar A. Bowman, Jr., EI Apr. 90 p217-220.

Why Can't You Ethicists Tell Me the *Right* Answers? Alastair S. Gunn and P. Aarne Vesilind, EI Jan. 90 p9-15.

Europe

Civil Engineering Into the 21st Century, George Fleming, EI July 88 p357-367.

Examination

Fundamentals of Engineering (FE) Examination Review, 1986, ASCE Task Committee on the Fundamentals of Engineering Examination Review, EI Apr. 88 p173-191.

Facilities

Inventory, Condition, and Performance Assessment in Infrastructure Facilities Management, Kenneth R. Maser, EI July 88 p271-280.

Faculty

Developing a Civil Engineer for the 21st Century, Ronald W. Eck, EI Apr. 90 p156-163.

Should There be a Design Requirement for the Ph.D. Degree? Thomas Sputo, EI Apr. 90 p190-192.

Tenure—Analysis for Professional Engineers in Education, William Lawson Magette, EI Apr. 90 p142-147.

Training Municipal Employees in Hazardous-Waste Issues, Carol J. Miller, EI Jan. 90 p61-66.

Flooding

Debris Torrents and Professional Responsibilities, S. O. Russell, EI Jan. 90 p49-55.

Fundamentals

Fundamentals of Engineering (FE) Examination Review, 1986, ASCE Task Committee on the Fundamentals of Engineering Examination Review, EI Apr. 88 p173-191.

Government policies

Impact of Water-Quality Policies on Water Availability, Thomas S. Maddock, EI Oct. 90 p333-344.

Graduate study

Should There be a Design Requirement for the Ph.D. Degree? Thomas Sputo, EI Apr. 90 p190-192.

Great Britain

Civil Engineering Into the 21st Century, George Fleming, EI July 88 p357-367.

Hazardous waste

Educational Program for Hazardous-Waste Management, Carol J. Miller, Ralph H. Kummler, James H. McMicking and Robert W. Powitz, EI Apr. 90 p221-228.

Trends and Solutions in Hazardous-Waste Cleanups, D. A. Vlatas, EI Jan. 90 p67-82.

Highway engineering

America's Highway Program, Ellis L. Armstrong, EI Apr. 88 p125-134.

Highway improvements

America's Highway Program, Ellis L. Armstrong, EI Apr. 88 p125-134.

Highway safety

America's Highway Program, Ellis L. Armstrong, EI Apr. 88 p125-134.

History

Sumer: Where Engineering Was Born, Isabel Vargas and Héctor Gallegos, EI Jan. 90 p83-92.

Human behavior

Existentialism, Engineering, and Liberal Arts, David A. Bella, EI July 90 p309-321.

Infrastructure

Inventory, Condition, and Performance Assessment in Infrastructure Facilities Management, Kenneth R. Maser, EI July 88 p271-280.

Innovation

Commercializing Construction Research, C. William Ibbs, EI Jan. 90 p1-8.

Instruction

Civil Engineering Education: Case Study Approach, Jeffrey S. Russell and Bob G. McCullouch, EI Apr. 90 p164-174.

Insurance

Understanding Terra RRG Professional Liability Insurance, Randall Horne, EI July 90 p239-249.

International compacts

U.S. Civil Engineer, International Cooperation, and Soviet Union, William J. Carroll, EI Apr. 90 p121-127.

International development

International Competition in Construction Technology, Daniel W. Halpin, EI Oct. 90 p351-359.

International factors

International Competition in Construction Technology, Daniel W. Halpin, EI Oct. 90 p351-359.

Quality in Constructed Projects: International Firms and Developing Countries, E. Koehn and Durgesh C. Regmi, EI Oct. 90 p388-396.

Interstate highways

America's Highway Program, Ellis L. Armstrong, EI Apr. 88 p125-134.

Inventories

Inventory, Condition, and Performance Assessment in Infrastructure Facilities Management, Kenneth R. Maser, EI July 88 p271-280.

Investment return analysis

Commercializing Construction Research, C. William Ibbs, EI Jan. 90 p1-8.

Iraq

Sumer: Where Engineering Was Born, Isabel Vargas and Héctor Gallegos, EI Jan. 90 p83-92.

Irrigation

Sumer: Where Engineering Was Born, Isabel Vargas and Héctor Gallegos, EI Jan. 90 p83-92.

Laws

A Time and Place for Ethics, Valcar A. Bowman, Jr., EI Apr. 90 p217-220.

Liability

Standard of Care for Delivery of Engineered Products, James C. Porter, EI Apr. 90 p193-201.

Trends and Solutions in Hazardous-Waste Cleanups, D. A. Vlatas, EI Jan. 90 p67-82.

Liability insurance

Trends and Solutions in Hazardous-Waste Cleanups, D. A. Vlatas, EI Jan. 90 p67-82.

Understanding Terra RRG Professional Liability Insurance, Randall Horne, EI July 90 p239-249.

Liberal arts

Existentialism, Engineering, and Liberal Arts, David A. Bella, EI July 90 p309-321.

Licenses

Standard of Care for Delivery of Engineered Products, James C. Porter, EI Apr. 90 p193-201.

Litigation

Tort Reform and Design Professional, Dennis R. Schapker, EI July 90 p258-265.

Maintenance costs

Meeting Issues of Preventive Maintenance for New York City Bridges, Maciej P. Bieniek, F. H. (Bud) Griffis, Sanjiv Gokhale and Samuel I. Schwartz, EI Oct. 90 p323-332.

Management

Developing a Civil Engineer for the 21st Century, Ronald W. Eck, EI Apr. 90 p156-163.

Is Professional Registration Essential for Public-Works Managers? Dennis A. Randolph and Douglas MacTavish, EI July 90 p302-308.

Standard of Care for Delivery of Engineered Products, James C. Porter, EI Apr. 90 p193-201.

Management engineering

Inventory, Condition, and Performance Assessment in Infrastructure Facilities Management, Kenneth R. Maser, EI July 88 p271-280.

Management systems

Meeting Issues of Preventive Maintenance for New York City Bridges, Maciej P. Bieniek, F. H. (Bud) Griffis, Sanjiv Gokhale and Samuel I. Schwartz, EI Oct. 90 p323-332.

Management training

Is Professional Registration Essential for Public-Works Managers? Dennis A. Randolph and Douglas MacTavish, EI July 90 p302-308.

Managers

Is Professional Registration Essential for Public-Works Managers? Dennis A. Randolph and Douglas MacTavish, EI July 90 p302-308.

Measurement

SI Conversion, T. J. Pilecki, EI Jan. 90 p42-48.

Minority groups

Technical Personnel Shortages in Construction Industry, Russel C. Jones, EI Jan. 90 p16-26.

Model accuracy

Level of Significance Selection in Engineering Analysis, Kaye L. Brubaker and Richard H. McCuen, EI Oct. 90 p375-387.

Models

Level of Significance Selection in Engineering Analysis, Kaye L. Brubaker and Richard H. McCuen, EI Oct. 90 p375-387.

Monitoring

Institutional Oversight to Enhance Integrity in Research, Richard H. McCuen, EI Jan. 90 p27-37.

Municipal engineering

Training Municipal Employees in Hazardous-Waste Issues, Carol J. Miller, EI Jan. 90 p61-66.

Municipal government

Training Municipal Employees in Hazardous-Waste Issues, Carol J. Miller, EI Jan. 90 p61-66.

Municipal wastes

Training Municipal Employees in Hazardous-Waste Issues, Carol J. Miller, EI Jan. 90 p61-66.

Negligence

Standard of Care for Delivery of Engineered Products, James C. Porter, EI Apr. 90 p193-201.

New York City

Meeting Issues of Preventive Maintenance for New York City Bridges, Maciej P. Bieniek, F. H. (Bud) Griffis, Sanjiv Gokhale and Samuel I. Schwartz, EI Oct. 90 p323-332.

Nuclear wastes disposal

Technocracy and Trust: Nuclear Waste Controversy, David A. Bella, Charles D. Mosher and Steven N. Calvo, EI Jan. 88 p27-39.

Peer review

Quality in Constructed Projects: International Firms and Developing Countries, E. Koehn and Durgesh C. Regmi, EI Oct. 90 p388-396.

Performance

Factors Affecting Quality Performance of Professional Engineers, Gene W. Dalton and Paul H. Thompson, EI Apr. 90 p202-216.

Performance characteristics

Factors Affecting Quality Performance of Professional Engineers, Gene W. Dalton and Paul H. Thompson, EI Apr. 90 p202-216.

Performance evaluation

Factors Affecting Quality Performance of Professional Engineers, Gene W. Dalton and Paul H. Thompson, EI Apr. 90 p202-216.

Inventory, Condition, and Performance Assessment in Infrastructure Facilities Management, Kenneth R. Maser, EI July 88 p271-280.

Performance standards

A Time and Place for Ethics, Valcar A. Bowman, Jr., EI Apr. 90 p217-220.

Personnel

Technical Personnel Shortages in Construction Industry, Russel C. Jones, EI Jan. 90 p16-26.

Policies

The Civil Engineer's Role in Energy Policy, Ben C. Gerwick, Jr., EI Oct. 88 p442-444.

Political factors

Dialogue on Political Contributions and Engineering, William E. Norris, EI Jan. 90 p38-41.

Population statistics

Technical Personnel Shortages in Construction Industry, Russel C. Jones, EI Jan. 90 p16-26.

Problem solving

Why Can't You Ethicists Tell Me the *Right* Answers? Alastair S. Gunn and P. Aarne Vesilind, EI Jan. 90 p9-15.

Professional activities

Tenure—Analysis for Professional Engineers in Education, William Lawson Magette, EI Apr. 90 p142-147.

Professional advancement

Is Professional Registration Essential for Public-Works Managers? Dennis A. Randolph and Douglas MacTavish, EI July 90 p302-308.

Ph.D. Roadblocks for Experienced Engineers, Bruce E. Marsh, EI Jan. 90 p56-60.

Professional development

Factors Affecting Quality Performance of Professional Engineers, Gene W. Dalton and Paul H. Thompson, EI Apr. 90 p202-216.

Need for "Professional" Education for Professional Engineers, T. E. Fenske and S. M. Fenske, EI Oct. 90 p345-350.

Ph.D. Roadblocks for Experienced Engineers, Bruce E. Marsh, EI Jan. 90 p56-60.

Tenure—Analysis for Professional Engineers in Education, William Lawson Magette, EI Apr. 90 p142-147.

Professional engineering

Professionalism, Larry G. Bell, EI Apr. 90 p188-189.

Why Can't You Ethicists Tell Me the *Right* Answers? Alastair S. Gunn and P. Aarne Vesilind, EI Jan. 90 p9-15.

Professional practice

Developing a Civil Engineer for the 21st Century, Ronald W. Eck, EI Apr. 90 p156-163.

Institutional Oversight to Enhance Integrity in Research, Richard H. McCuen, EI Jan. 90 p27-37.

Plain Engineering: Philosophical and Ethical View, Steven S. Crider, EI Apr. 90 p148-155.

Proper Use of P.E. Seal, Robert A. Green, EI July 90 p287-292.

Standard of Care for Delivery of Engineered Products, James C. Porter, EI Apr. 90 p193-201.

A Time and Place for Ethics, Valcar A. Bowman, Jr., EI Apr. 90 p217-220.

Understanding Terra RRG Professional Liability Insurance, Randall Horne, EI July 90 p239-249.

Professional registration

Fundamentals of Engineering (FE) Examination Review, 1986, ASCE Task Committee on the Fundamentals of Engineering Examination Review, EI Apr. 88 p173-191.

Is Professional Registration Essential for Public-Works Managers? Dennis A. Randolph and Douglas MacTavish, EI July 90 p302-308.

Proper Use of P.E. Seal, Robert A. Green, EI July 90 p287-292.

Professional role

The Civil Engineer's Role in Energy Policy, Ben C. Gerwick, Jr., EI Oct. 88 p442-444.

Professional schools

Need for "Professional" Education for Professional Engineers, T. E. Fenske and S. M. Fenske, EI Oct. 90 p345-350.

Project management

Quality in Constructed Projects: International Firms and Developing Countries, E. Koehn and Durgesh C. Regmi, EI Oct. 90 p388-396.

Public benefits

A Time and Place for Ethics, Valcar A. Bowman, Jr., EI Apr. 90 p217-220.

Public information programs

America's Highway Program, Ellis L. Armstrong, EI Apr. 88 p125-134.

Public opinion

Technocracy and Trust: Nuclear Waste Controversy, David A. Bella, Charles D. Mosher and Steven N. Calvo, EI Jan. 88 p27-39.

Publishing

Plain Engineering: Philosophical and Ethical View, Steven S. Crider, EI Apr. 90 p148-155.

Quality assurance

Quality in Constructed Projects: International Firms and Developing Countries, E. Koehn and Durgesh C. Regmi, EI Oct. 90 p388-396.

Quality control

Quality in Constructed Projects: International Firms and Developing Countries, E. Koehn and Durgesh C. Regmi, EI Oct. 90 p388-396.

Reconstruction

America's Highway Program, Ellis L. Armstrong, EI Apr. 88 p125-134.

Recruiting

Technical Personnel Shortages in Construction Industry, Russel C. Jones, EI Jan. 90 p16-26.

Registration

Proper Use of P.E. Seal, Robert A. Green, EI July 90 p287-292.

Regression analysis

Level of Significance Selection in Engineering Analysis, Kaye L. Brubaker and Richard H. McCuen, EI Oct. 90 p375-387.

Rehabilitation

America's Highway Program, Ellis L. Armstrong, EI Apr. 88 p125-134.

Research

America's Highway Program, Ellis L. Armstrong, EI Apr. 88 p125-134.

Civil Engineering Needs in the 21st Century, J. M. Roesset and J. T. P. Yao, EI July 88 p248-255.

Commercializing Construction Research, C. William Ibbs, EI Jan. 90 p1-8.

Institutional Oversight to Enhance Integrity in Research, Richard H. McCuen, EI Jan. 90 p27-37.

Research and development

Commercializing Construction Research, C. William Ibbs, EI Jan. 90 p1-8.

Responsibility

Debris Torrents and Professional Responsibilities, S. O. Russell, EI Jan. 90 p49-55.

Surety Bonding and Owner-Contractor Prequalification: Comparison, Jeffrey S. Russell, EI Oct. 90 p360-374.

Retention

Technical Personnel Shortages in Construction Industry, Russel C. Jones, EI Jan. 90 p16-26.

Risk allocation

Trends and Solutions in Hazardous-Waste Clean-ups, D. A. Vlatas, EI Jan. 90 p67-82.

Risk management

Standard of Care for Delivery of Engineered Products, James C. Porter, EI Apr. 90 p193-201.

Understanding Terra RRG Professional Liability Insurance, Randall Horne, EI July 90 p239-249.

Risk taking

Trends and Solutions in Hazardous-Waste Clean-ups, D. A. Vlatas, EI Jan. 90 p67-82.

Salaries

ASCE 1989 Salary Survey, Committee on Employment Conditions of the Professional Practice Division, EI July 90 p266-283.

Seismic design

Be Prepared When Tremors Come: Earthquake Issues in the Mid-South, Tzyy-Shiou Chang, EI July 90 p284-286.

Future Civil Engineering in Seismic Zones, Sergio Gonzalez-Karg, EI July 88 p368-370.

Seismic hazard

Be Prepared When Tremors Come: Earthquake Issues in the Mid-South, Tzyy-Shiou Chang, EI July 90 p284-286.

Social communication

Use of Humor by Engineers in Oral Presentations, Fred Curtis, EI July 90 p293-301.

Social impact

Sumer: Where Engineering Was Born, Isabel Vargas and Héctor Gallegos, EI Jan. 90 p83-92.

Social organization

Sumer: Where Engineering Was Born, Isabel Vargas and Héctor Gallegos, EI Jan. 90 p83-92.

Social values

Existentialism, Engineering, and Liberal Arts, David A. Bella, EI July 90 p309-321.

Speeches

Use of Humor by Engineers in Oral Presentations, Fred Curtis, EI July 90 p293-301.

Standards

Professionalism, Larry G. Bell, EI Apr. 90 p188-189.

Standard of Care for Delivery of Engineered Products, James C. Porter, EI Apr. 90 p193-201.

Statistics

Level of Significance Selection in Engineering Analysis, Kaye L. Brubaker and Richard H. McCuen, EI Oct. 90 p375-387.

Students

Professional Ethical Orientation of Civil Engineering Co-op Students, Robert Tillman, EI Apr. 90 p175-187.

Technical Personnel Shortages in Construction Industry, Russel C. Jones, EI Jan. 90 p16-26.

Surge

Debris Torrents and Professional Responsibilities, S. O. Russell, EI Jan. 90 p49-55.

Surveys, data collection

ASCE 1989 Salary Survey, Committee on Employment Conditions of the Professional Practice Division, EI July 90 p266-283.

Computing in Civil Engineering Curriculum: Needs and Issues, Kincho H. Law, William J. Rasdorf, Mohammad Karamouz and Osama Y. Abudayyeh, EI Apr. 90 p128-141.

Teaching methods

Civil Engineering Education: Case Study Approach, Jeffrey S. Russell and Bob G. McCullouch, EI Apr. 90 p164-174.

Guidance for Engineering-Design-Class Lectures on Ethics, Richard H. McCuen, EI July 90 p251-257.

Technology

Existentialism, Engineering, and Liberal Arts, David A. Bella, EI July 90 p309-321.

International Competition in Construction Technology, Daniel W. Halpin, EI Oct. 90 p351-359.

Sumer: Where Engineering Was Born, Isabel Vargas and Héctor Gallegos, EI Jan. 90 p83-92.

Technology transfer

Commercializing Construction Research, C. William Ibbs, EI Jan. 90 p1-8.

Tort laws

Tort Reform and Design Professional, Dennis R. Schapker, EI July 90 p258-265.

Trends and Solutions in Hazardous-Waste Cleanups, D. A. Vlatas, EI Jan. 90 p67-82.

Trends

Developing a Civil Engineer for the 21st Century, Ronald W. Eck, EI Apr. 90 p156-163.

Undergraduate study

Developing a Civil Engineer for the 21st Century, Ronald W. Eck, EI Apr. 90 p156-163.

Professional Ethical Orientation of Civil Engineering Co-op Students, Robert Tillman, EI Apr. 90 p175-187.

United States

International Competition in Construction Technology, Daniel W. Halpin, EI Oct. 90 p351-359.

U.S. Civil Engineer, International Cooperation, and Soviet Union, William J. Carroll, EI Apr. 90 p121-127.

Units of measurement

SI Conversion, T. J. Pilecki, EI Jan. 90 p42-48.

Universities

Training Municipal Employees in Hazardous-Waste Issues, Carol J. Miller, EI Jan. 90 p61-66.

Urban development

Sumer: Where Engineering Was Born, Isabel Vargas and Héctor Gallegos, EI Jan. 90 p83-92.

U.S.S.R.

U.S. Civil Engineer, International Cooperation, and Soviet Union, William J. Carroll, EI Apr. 90 p121-127.

Value engineering

Why Can't You Ethicists Tell Me the *Right* Answers? Alastair S. Gunn and P. Aarne Vesilind, EI Jan. 90 p9-15.

Waste management

Educational Program for Hazardous-Waste Management, Carol J. Miller, Ralph H. Kummler, James H. McMicking and Robert W. Powitz, EI Apr. 90 p221-228.

Waste site cleanup

Trends and Solutions in Hazardous-Waste Cleanups, D. A. Vlatas, EI Jan. 90 p67-82.

Water allocation policy

Impact of Water-Quality Policies on Water Availability, Thomas S. Maddock, EI Oct. 90 p333-344.

Water flow

Debris Torrents and Professional Responsibilities, S. O. Russell, EI Jan. 90 p49-55.

Water quality

Impact of Water-Quality Policies on Water Availability, Thomas S. Maddock, EI Oct. 90 p333-344.

Water quality control

Impact of Water-Quality Policies on Water Availability, Thomas S. Maddock, EI Oct. 90 p333-344.

Water supply

Impact of Water-Quality Policies on Water Availability, Thomas S. Maddock, EI Oct. 90 p333-344.

Sumer: Where Engineering Was Born, Isabel Vargas and Héctor Gallegos, EI Jan. 90 p83-92.

Writing

Plain Engineering: Philosophical and Ethical View, Steven S. Crider, EI Apr. 90 p148-155.

Writing papers

Plain Engineering: Philosophical and Ethical View, Steven S. Crider, EI Apr. 90 p148-155.

AUTHOR INDEX

Abudayyeh, Osama Y.
see Law, Kincho H., EI Apr. 90, p128-141

Armstrong, Ellis L.
America's Highway Program, EI Apr. 88, p125-134
disc: Robert H. Gedney, EI Jan. 90, p102-103
disc: Oscar T. Lyon, EI Jan. 90, p103-104
disc: Ross G. Stapp, EI Jan. 90, p104-105
clo: EI Jan. 90, p105-107

ASCE Task Committee on the Fundamentals of Engineering Examination Review
Fundamentals of Engineering (FE) Examination Review, 1986, EI Apr. 88, p173-191
disc: Emmett M. Laursen, EI Jan. 90, p107-108
disc: Priscilla J. Neale, EI Jan. 90, p108-109
disc: Dan H. Pletta, EI Jan. 90, p109-110
disc: Frank D. Schaumburg, EI Jan. 90, p110-111
clo: EI Jan. 90, p111-113

Ayyangar, B. S. R.
disc. (of Future Civil Engineering in Seismic Zones, by Sergio Gonzalez-Karg, EI July 88, p368-370), EI Jan. 90, p115-116

Bell, Larry G.
Professionalism, EI Apr. 90, p188-189

Bella, David A.
Existentialism, Engineering, and Liberal Arts, EI July 90, p309-321
Technocracy and Trust: Nuclear Waste Controversy, EI Jan. 88, p27-39
disc: Douglas A. Henderson, EI Jan. 90, p94-95
disc: Bruce E. Marsh, EI Jan. 90, p96-98
disc: Ruth F. Weiner, EI Jan. 90, p98-99
clo: EI Jan. 90, p99-101

Bieniek, Maciej P.
Meeting Issues of Preventive Maintenance for New York City Bridges, with F. H. (Bud) Griffis, Sanjiv Gokhale and Samuel I. Schwartz, EI Oct. 90, p323-332

Bowman, Valcar A., Jr.
A Time and Place for Ethics, EI Apr. 90, p217-220

Brubaker, Kaye L.
Level of Significance Selection in Engineering Analysis, with Richard H. McCuen, EI Oct. 90, p375-387

Calvo, Steven N., (disc), EI Jan. 90, p99-101
see Bella, David A., EI Jan. 88, p27-39
see Henderson, Douglas A., (disc), EI Jan. 90, p94-95
see Marsh, Bruce E., (disc), EI Jan. 90, p96-98
see Weiner, Ruth F., (disc), EI Jan. 90, p98-99

Carroll, William J.
U.S. Civil Engineer, International Cooperation, and Soviet Union, EI Apr. 90, p121-127

Chang, Tzyy-Shiou
Be Prepared When Tremors Come: Earthquake Issues in the Mid-South, EI July 90, p284-286

Committee on Employment Conditions of the Professional Practice Division
ASCE 1989 Salary Survey, EI July 90, p266-283

Crider, Steven S.
Plain Engineering: Philosophical and Ethical View, EI Apr. 90, p148-155

Curtis, Fred
Use of Humor by Engineers in Oral Presentations, EI July 90, p293-301

Dalton, Gene W.
Factors Affecting Quality Performance of Professional Engineers, with Paul H. Thompson, EI Apr. 90, p202-216

Eck, Ronald W.
Developing a Civil Engineer for the 21st Century, EI Apr. 90, p156-163

Fenske, S. M.
see Fenske, T. E., EI Oct. 90, p345-350

Fenske, T. E.
Need for "Professional" Education for Professional Engineers, with S. M. Fenske, EI Oct. 90, p345-350

Fleming, George
Civil Engineering Into the 21st Century, EI July 88, p357-367
disc: Ananda D. Moonasingha, EI Jan. 90, p113-115

Gallegos, Héctor
see Vargas, Isabel, EI Jan. 90, p83-92

Gedney, Robert H.
disc. (of America's Highway Program, by Ellis L. Armstrong, EI Apr. 88, p125-134), EI Jan. 90, p102-103

Gerwick, Ben C., Jr.
The Civil Engineer's Role in Energy Policy, EI Oct. 88, p442-444
disc: Eugene H. Harlow, EI Oct. 90, p406
clo: EI Oct. 90, p406

Gokhale, Sanjiv
see Bieniek, Maciej P., EI Oct. 90, p323-332

Gonzalez-Karg, Sergio
Future Civil Engineering in Seismic Zones, EI July 88, p368-370
disc: B. S. R. Ayyangar, EI Jan. 90, p115-116

Green, Robert A.
Proper Use of P.E. Seal, EI July 90, p287-292

Griffis, F. H. (Bud)
see Bieniek, Maciej P., EI Oct. 90, p323-332

Gunn, Alastair S.
Why Can't You Ethicists Tell Me the *Right* Answers?, with P. Aarne Vesilind, EI Jan. 90, p9-15

Halpin, Daniel W.
International Competition in Construction Technology, EI Oct. 90, p351-359

Harlow, Eugene H.
disc. (of The Civil Engineer's Role in Energy Policy, by Ben C. Gerwick, Jr., EI Oct. 88, p442-444), EI Oct. 90, p406

Henderson, Douglas A.
disc. (of Technocracy and Trust: Nuclear Waste Controversy, by David A. Bella, Charles D. Mosher and Steven N. Calvo, EI Jan. 88, p27-39), EI Jan. 90, p94-95

Horne, Randall
Understanding Terra RRG Professional Liability Insurance, EI July 90, p239-249

Ibbs, C. William
Commercializing Construction Research, EI Jan. 90, p1-8

Jones, Russel C.
Technical Personnel Shortages in Construction Industry, EI Jan. 90, p16-26

Karamouz, Mohammad
see Law, Kincho H., EI Apr. 90, p128-141

Koehn, E.
Quality in Constructed Projects: International Firms and Developing Countries, with Durgesh C. Regmi, EI Oct. 90, p388-396

Kummler, Ralph H.
see Miller, Carol J., EI Apr. 90, p221-228

Laursen, Emmett M.
disc. (of Fundamentals of Engineering (FE) Examination Review, 1986, EI Apr. 88, p173-191), EI Jan. 90, p107-108

Law, Kincho H.
Computing in Civil Engineering Curriculum: Needs and Issues, with William J. Rasdorf, Mohammad Karamouz and Osama Y. Abudayyeh, EI Apr. 90, p128-141

Lyon, Oscar T.
disc. (of America's Highway Program, by Ellis L. Armstrong, EI Apr. 88, p125-134), EI Jan. 90, p103-104

McBride, Robert R.
disc. (of Inventory, Condition, and Performance Assessment in Infrastructure Facilities Management, by Kenneth R. Maser, EI July 88, p271-280), EI Apr. 90, p232-233

McCuen, Richard H.
Guidance for Engineering-Design-Class Lectures on Ethics, EI July 90, p251-257
Institutional Oversight to Enhance Integrity in Research, EI Jan. 90, p27-37
see Brubaker, Kaye L., EI Oct. 90, p375-387

McCullouch, Bob G.
see Russell, Jeffrey S., EI Apr. 90, p164-174

McMicking, James H.
see Miller, Carol J., EI Apr. 90, p221-228

MacTavish, Douglas
see Randolph, Dennis A., EI July 90, p302-308

Maddock, Thomas S.
Impact of Water-Quality Policies on Water Availability, EI Oct. 90, p333-344

Magette, William Lawson
Tenure—Analysis for Professional Engineers in Education, EI Apr. 90, p142-147

Marsh, Bruce E.
Ph.D. Roadblocks for Experienced Engineers, EI Jan. 90, p56-60
disc. (of Technocracy and Trust: Nuclear Waste Controversy, by David A. Bella, Charles D. Mosher and Steven N. Calvo, EI Jan. 88, p27-39), EI Jan. 90, p96-98

Maser, Kenneth R.
Inventory, Condition, and Performance Assessment in Infrastructure Facilities Management, EI July 88, p271-280
disc: Robert R. McBride, EI Apr. 90, p232-233
disc: Neil Mickleborough, EI Apr. 90, p233-234
disc: James C. Porter, EI Apr. 90, p234-236
clo: EI Apr. 90, p236-237

Mickleborough, Neil
disc. (of Inventory, Condition, and Performance Assessment in Infrastructure Facilities Management, by Kenneth R. Maser, EI July 88, p271-280), EI Apr. 90, p233-234

Miller, Carol J.
Educational Program for Hazardous-Waste Management, with Ralph H. Kummler, James H. McMicking and Robert W. Powitz, EI Apr. 90, p221-228
Training Municipal Employees in Hazardous-Waste Issues, EI Jan. 90, p61-66

Moonasinghe, Ananda D.
disc. (of Civil Engineering Into the 21st Century, by George Fleming, EI July 88, p357-367), EI Jan. 90, p113-115

Mosher, Charles D., (disc), EI Jan. 90, p99-101
see Bella, David A., EI Jan. 88, p27-39
see Henderson, Douglas A., (disc), EI Jan. 90, p94-95
see Marsh, Bruce E., (disc), EI Jan. 90, p96-98
see Weiner, Ruth F., (disc), EI Jan. 90, p98-99

Neale, Priscilla J.
disc. (of Fundamentals of Engineering (FE) Examination Review, 1986, EI Apr. 88, p173-191), EI Jan. 90, p108-109

Niedzwecki, John M.
disc. (of Civil Engineering Needs in the 21st Century, by J. M. Roesset and J. T. P. Yao, EI July 88, p248-255), EI Apr. 90, p230-231

Norris, William E.
Dialogue on Political Contributions and Engineering, EI Jan. 90, p38-41

Pilecki, T. J.
SI Conversion, EI Jan. 90, p42-48

Pietta, Dan H.
disc. (of Fundamentals of Engineering (FE) Examination Review, 1986, EI Apr. 88, p173-191), EI Jan. 90, p109-110

Porter, James C.
Standard of Care for Delivery of Engineered Products, EI Apr. 90, p193-201
disc. (of Inventory, Condition, and Performance Assessment in Infrastructure Facilities Management, by Kenneth R. Maser, EI July 88, p271-280), EI Apr. 90, p234-236

Powitz, Robert W.
see Miller, Carol J., EI Apr. 90, p221-228

Randolph, Dennis A.
Is Professional Registration Essential for Public-Works Managers?, with Douglas MacTavish, EI July 90, p302-308

Raudorf, William J.
see Law, Kincho H., EI Apr. 90, p128-141

Regmi, Durgesh C.
see Koehn, E., EI Oct. 90, p388-396

Roesset, J. M.
Civil Engineering Needs in the 21st Century, EI July 88, p248-255
disc: John M. Niedzwecki, EI Apr. 90, p230-231
clo: EI Apr. 90, p231-232

Russell, Jeffrey S.
Civil Engineering Education: Case Study Approach, with Bob G. McCullouch, EI Apr. 90, p164-174
Surety Bonding and Owner-Contractor Prequalification: Comparison, EI Oct. 90, p360-374

Russell, S. O.
Debris Torrents and Professional Responsibilities, EI Jan. 90, p49-55

Schapker, Dennis R.
Tort Reform and Design Professional, EI July 90, p258-265

Schaumburg, Frank D.
disc. (of Fundamentals of Engineering (FE) Examination Review, 1986, EI Apr. 88, p173-191), EI Jan. 90, p110-111

Schwartz, Samuel I.
see Bieniek, Maciej P., EI Oct. 90, p323-332

Shah, Kanti L.
Creative-Design Course for Engineering Freshmen, EI Oct. 90, p397-403

Sputo, Thomas
Should There be a Design Requirement for the Ph.D. Degree?, EI Apr. 90, p190-192

Stapp, Ross G.
disc. (of America's Highway Program, by Ellis L. Armstrong, EI Apr. 88, p125-134), EI Jan. 90, p104-105

Thompson, Paul H.
see Dalton, Gene W., EI Apr. 90, p202-216

Tillman, Robert
Professional Ethical Orientation of Civil Engineering Co-op Students, EI Apr. 90, p175-187

Vargas, Isabel
Sumer: Where Engineering Was Born, with Héctor Gallegos, EI Jan. 90, p83-92

Vesilind, P. Aarne
see Gunn, Alastair S., EI Jan. 90, p9-15

Vlatas, D. A.
Trends and Solutions in Hazardous-Waste Cleanups, EI Jan. 90, p67-82

Weiner, Ruth F.
disc. (of Technocracy and Trust: Nuclear Waste Controversy, by David A. Bella, Charles D. Mosher and Steven N. Calvo, EI Jan. 88, p27-39), EI Jan. 90, p98-99

Yao, J. T. P., (disc), EI Apr. 90, p231-232
see Niedzwecki, John M., (disc), EI Apr. 90, p230-231
see Roesset, J. M., EI July 88, p248-255